

Pushing the Envelope			
2007 Mathematics			
Next Generation Sunshine State Standards			
Florida Mathematics			
Grade 5			
Activity/Lesson	State	Standards	
Physics and Math (pgs. 43-63)	FL	MA.5.MA.5.G.5.4	Derive and apply formulas for areas of parallelograms, triangles, and trapezoids from the area of a rectangle.
Pushing the Envelope			
2007 Mathematics			
Next Generation Sunshine State Standards			
Florida Mathematics			
Grade 6			
Activity/Lesson	State	Standards	
Chemistry (pgs. 25-41)	FL	MA.6.MA.6.G.4.3	Determine a missing dimension of a plane figure or prism, given its area or volume and some of the dimensions, or determine the area or volume given the dimensions.
Physics and Math (pgs. 43-63)	FL	MA.6.MA.6.A.2.1	Connect ratio and rates to multiplication and division: Use reasoning about multiplication and division to solve ratio and rate problems.
Physics and Math (pgs. 43-63)	FL	MA.6.MA.6.A.2.2	Connect ratio and rates to multiplication and division: Interpret and compare ratios and rates.
Physics and Math (pgs. 43-63)	FL	MA.6.MA.6.A.3.4	Write, interpret, and use mathematical expressions and equations: Solve problems given a formula.
Rocket Activity (pgs. 69-75)	FL	MA.6.MA.6.A.3.4	Write, interpret, and use mathematical expressions and equations: Solve problems given a formula.
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2007 Mathematics			
Next Generation Sunshine State Standards			
Florida Mathematics			
Grade 7			
Activity/Lesson	State	Standards	
Types of Engines (pgs. 11-23)	FL	MA.7.MA.7.G.2.1	Justify and apply formulas for surface area and volume of pyramids, prisms, cylinders, and cones.
Chemistry (pgs. 25-41)	FL	MA.7.MA.7.G.2.1	Justify and apply formulas for surface area and volume of pyramids, prisms, cylinders, and cones.
Chemistry (pgs. 25-41)	FL	MA.7.MA.7.G.4.1	Determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures and apply these relationships to solve problems.
Physics and Math (pgs. 43-63)	FL	MA.7.MA.7.G.2.1	Justify and apply formulas for surface area and volume of pyramids, prisms, cylinders, and cones.

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2007 Mathematics			
Next Generation Sunshine State Standards			
Florida Mathematics			
Grade 8			
Activity/Lesson	State	Standards	
Physics and Math (pgs. 43-63)	FL	MA.8.MA.8.A.1. 5	Translate among verbal, tabular, graphical and algebraic representations of linear functions.
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2007 Mathematics			
Next Generation Sunshine State Standards			
Florida Mathematics			
Grades 9-12 (Algebra)			
Activity/Lesson	State	Standards	
Physics and Math (pgs. 43-63)	FL	MA.9- 12.MA.912.A.3.1 1	Write an equation of a line that models a data set and use the equation or the graph to make predictions. Describe the slope of the line in terms of the data, recognizing that the slope is the rate of change.
Physics and Math (pgs. 43-63)	FL	MA.9- 12.MA.912.A.5. 1	Simplify rational expressions and solve rational equations using what has been learned about factoring polynomials: Simplify algebraic ratios.